

MOSQUITO NOTES.—No. 4. (Continued.)

BY C. S. LUDLOW, M. SC.

Laboratory of the Office of the Surgeon-General, U. S. Army, Washington, D. C.

The "confusion worse confounded" in which the mosquitoes of America are at present enveloped may be illustrated by the two following instances :

In the August number, CANADIAN ENTOMOLOGIST (1904) I described a mosquito from Benecia, Cal., as *Grabhamia de Neidmannii*, and, some time afterward, received a note from Mr. Coquillett, stating he believed it to be his *Culex squamiger* (originally published as *Teniorhynchus*). As the insect did not belong to *Culex*, as restricted by Theobald, and I had not seen Mr. Coquillett's description, I let the matter rest till I should have further information. Now, for some time, I have been practically convinced that Mr. Coquillett was correct, and that *Grabhamia de Neidmannii* must sink as a synonym of his *squamiger*, the genus of which seems, however, to be still undetermined, Mr. Coquillett now referring it to *Culex*, Dr. Dyar to *Grabhamia*, and Dr. Felt to *Culicida*.

In June, 1905, in this magazine I described another mosquito (from the Sierra Nevada Mts.) as *Teniorhynchus Sierrensis*, the description being made from several very imperfect specimens. During the fall of 1905 some specimens in good condition were received, and to my astonishment I found that, partly from an error in transcribing my original notes, partly from the poor condition of the specimens, not only had a gross error in the description of the tarsi arisen, but that the scales of the scutellum, which are long, very broadly spatulate, and only slightly curved, with a few slender curved scales, apparently mostly at the base of the scutellum, carried it out of *Teniorhynchus*. The description as to colours, etc., as now corrected, makes it more than probable that it is Coquillett's *varipalpus*, but if this be so, it is in any case *not* a *Culex*, nor a *Teniorhynchus*, but probably lies near *Finlaya*.

The following is apparently a new mosquito, being one of the very few in the U. S. having light apical abdominal markings :

Culex Frickii, n. sp.—Female : Head covered with pale ochraceous, almost white scales, long curved ones, heavily intermingled with dark brown forked scales on the occiput and vertex, flat lateral scales, light around the eyes, with a few dark bristles projecting forward ; antennæ brown, verticels and pubescence brown, first joint with a few light scales, basal joint covered with "frost" and a few white scales ; palpi dark brown,

distal joint small; proboscis brown; clypeus brown, with "frost"; eyes dark brown.

Thorax brown; prothoracic lobes covered with pale ochraceous scales and dark brown bristles; mesonotum with narrow curved dark brown scales, a golden-brown in some lights, a few pale ochraceous ones hardly forming a line on the lateral margins and an arch of them surrounding the "bare space," two submedian bare lines from cephalic end nearly to "bare space" covered with "frost," so that they seem like two very fine but distinct white lines; scutellum brown, with pale ochraceous curved scales and large brown bristles; pleura covered with white "frost" and having a couple of large bunches of white, flat spatulate scales; metanotum brown.

Abdomen brown, covered with rather broad flat scales, tending to iridescence, narrow white apical bands, and white apical lateral spots continuous with the scaling of the venter, which is white; white apical hairs. On the last segment the apical band becomes much diminished on the median line, possibly sometimes broken so as to form two spots.

Legs as a whole brown; coxæ and trochanters light and nearly naked, but showing the white "frost"; femora light at base and on ventral aspect, a small light knee-spot minutely involving both sides of the joint; tibia brown, a minute apical light spot involving both sides of the joint, remainder of tarsi all brown; all ungues small, equal, and simple.

The colouring as a whole is dark, but the scales are very sensitive to the position of the light, and on the legs it is almost impossible to determine if there be a very narrow light line on the ventral aspect of the tibia or not, for in some lights it is not apparent, and in others it appears present. The mesothorax shows the same trait, in that the tips of the scales become golden-brown, and are thus very misleading.

Wings clear; scales brown, slender, covering the distal half of wing rather heavily; cells vary somewhat in the two wings, first submarginal about a third longer and nearly the same width as second posterior, the stem of the former about a fourth the length of its cell, of the latter a little more than half the cell's length; supernumerary and mid about the same length and meet, posterior cross-vein slightly shorter and three times its length distant. Halteres light, a few brown scales on the distal parts of stem.

Length, 4 mm. Habitat, Fort Snelling, Minn. Taken Oct. 1.

Collected and sent by Major E. B. Frick, Surg. U. S. Army, after whom it is named.

It lies very near *territans*, but differs in general colouring, in the "frosty" sub-median lines on the mesonotum, the light scales around the "bare space," light scales on the scutellum, the much better developed apical abdominal bands, white bases and venter of femora, and the minute spot at apex of tibia.

In the Entomological News, Nov., 1905, Prof. Glenn W. Herrick, Agricultural College, Miss., published some *notes on a *Megarhinus*, describing and figuring the larva, and making mention of some characteristics of the three adults which he reared from the larvæ. Prof. Herrick's specimens were referred to *M. Portoricensis*, Theob., but they differ from this species (1) in the length of a palpal joint, usually a stable feature, Theobald's having the penultimate as long as the ultimate, and Herrick's having the penultimate only half as long as the ultimate; (2) in the colour of the head, Theobald's being brown, and Herrick's specimens "bluish-green, (iridescent)"; (3) in the tarsal banding, Theobald's species having the penultimate joint of the hind legs "white, except a small dark basal spot," and the same joint in Herrick's specimens being "white, except a black ring at the distal ends." As these differences seem specific, I was about to give here a full description of the insect, and to propose that it should be named in honour of the discoverer, but since my MS. was sent in for publication I have learnt that Mr. Theobald is describing and naming it, and therefore I refrain from doing so.

ACKNOWLEDGMENTS.

The Curator begs to acknowledge with grateful thanks the gift to the Society's collections of 24 specimens, representing 11 species, of Lepidoptera by Mr. Henry S. Saunders, of Toronto.

Also a box of Coleoptera from Mr. Norman Criddle, of Aweme, Manitoba, containing 120 specimens, representing 64 species, many not previously recorded in Canada, and all new to our collections.

Heartly thanks are due also to Mr. Henry H. Lyman, of Montreal, for photographs of the late Messrs George J. Bowles and F. B. Caulfield, who were active and zealous members of the Montreal Branch in years gone by. These portraits were only procured by Mr. Lyman after considerable trouble and search. Further additions to the Society's albums will be very welcome.

* "Notes on Some Mississippi Mosquitoes."